

WHAT IS CLAIMED IS:

- 1 1. A method for improving the intelligibility of speech output by a speech
2 synthesizer, comprising the steps of:
3 determining if uncommon words exist in the text; and
4 if it is determined that an uncommon word exists in the text, pausing the output of
5 the synthesized speech of the uncommon word to offset the uncommon word from its
6 surrounding speech.
- 1 2. The method of Claim 1, wherein the determination is made by comparing
2 the input text to common words stored in a database and determining if a word is
3 uncommon if the word is not in the database.
- 1 3. The method of Claim 1, wherein a word is determined as uncommon if the
2 word is capitalized.
- 1 4. The method of Claim 1, wherein the determination is made by using a
2 statistical language model.
- 1 5. The method of Claim 4, wherein the statistical language model compares a
2 calculated value with a threshold value and if the calculated value is less than the
3 threshold value the word is determined as uncommon.
- 1 6. The method of Claim 1, wherein the determination is made by using a
2 prediction algorithm.
- 1 7. The method of Claim 6, wherein the prediction algorithm compares a
2 calculated value with a threshold value and if the calculated value is less than the
3 threshold value the word is determined as uncommon.

1 8. The method of Claim 1, wherein the pausing is inserted at least one of
2 before, after and within the uncommon word.

1 9. A system for improving the intelligibility of speech output by a speech
2 synthesizer, comprising:
3 a rare sequence detector to determining if uncommon words exist in the text, and
4 if it is determined that an uncommon word exists in the text, pausing the output of the
5 synthesized speech of the uncommon word to offset the uncommon word from its
6 surrounding speech.

1 10. The system of Claim 9, wherein the rare sequence detector determines an
2 that a word is an uncommon word by comparing the input text to common words stored
3 in a database and determining if a word is uncommon if the word is not in the database.

1 11. The system of Claim 9, wherein the rare sequence detector determines that
2 a word is an uncommon word if the word is capitalized.

1 12. The system of Claim 9, wherein the rare sequence detector determines that
2 a word is an uncommon word by using a statistical language model.

1 13. The system of Claim 12, wherein the statistical language model compares
2 a calculated value with a threshold value and if the calculated value is less than the
3 threshold value the word is determined as uncommon.

1 14. The system of Claim 9, wherein the rare sequence detector determines that
2 a word is an uncommon word by using a prediction algorithm.

1 15. The system of Claim 14, wherein the prediction algorithm compares a
2 calculated value with a threshold value and if the calculated value is less than the
3 threshold value the word is determined as uncommon.

1 16. The system of Claim 9, wherein the pausing is inserted at least one of
2 before, after and within the uncommon word.

1 17.
18. A computer program device readable by a machine, tangibly embodying a
2 program of instructions executable by the machine to perform method steps for
3 determining if uncommon words exist in the text, and if it is determined that an
4 uncommon word exists in the text, pausing the output of the synthesized speech of the
5 uncommon word to offset the uncommon word from its surrounding speech.

1 18.
19. The computer program device readable by a machine, tangibly embodying
2 a program of instructions executable by the machine of Claim 18, wherein a word is
3 determined as uncommon if the word is capitalized.

1 19.
20. The computer program device readable by a machine, tangibly embodying
2 a program of instructions executable by the machine of Claim 18, wherein the
3 determination is made by using a statistical language model.

1 20.
21. The computer program device readable by a machine, tangibly embodying
2 a program of instructions executable by the machine of Claim 20, wherein the statistical
3 language model compares a calculated value with a threshold value and if the calculated
4 value is less than the threshold value the word is determined as uncommon.

1 21.
22. The computer program device readable by a machine, tangibly embodying
2 a program of instructions executable by the machine of Claim 18, wherein the
3 determination is made by using a prediction algorithm.

20.
1 23. The computer program device readable by a machine, tangibly embodying
2 a program of instructions executable by the machine of Claim 22, wherein the prediction
3 algorithm compares a calculated value with a threshold value and if the calculated value
4 is less than the threshold value the word is determined as uncommon.

21.
1 24. The computer program device readable by a machine, tangibly embodying
2 a program of instructions executable by the machine of Claim 18, wherein the pausing is
3 inserted at least one of before, after and within the uncommon word.